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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,606

06/03/2005

Masato Yoshioka

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2292 7590 04/02/2009  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

FISHER, ABIGAIL L

ART UNIT

PAPER NUMBER

1616

NOTIFICATION DATE

DELIVERY MODE

04/02/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,606	<b>Applicant(s)</b> YOSHIOKA ET AL.	
	<b>Examiner</b> ABIGAIL FISHER	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/13/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/21/08 has been entered.

Receipt of Amendments and Remarks filed on November 21 2008 is acknowledged. Claim 1 was amended. Claims 1-8 are pending.

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 1/13/09 was considered by the examiner.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

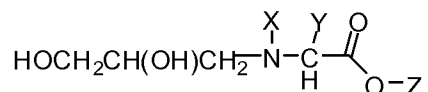
This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The rejection of claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrell et al. (US Patent No. 5514808) is **withdrawn** in light of Applicants' amendments filed on 11/21/08 in which CH<sub>2</sub>CH(OH)CH<sub>2</sub>OH or an alkyl group having 1 to four carbons was deleted as a choice for the X moiety of formula I.

**Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Velisek et al. (J. Food. Science, 1991) in view of Carrell et al. (US Patent No. 5514808, cited in the Office action mailed on 9/22/08).**

### Applicant Claims

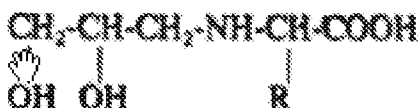
The instant application claims a composition comprising an amino acid N-glyceryl derivative that has the following formula (formula I):



where in X is a hydrogen; Y is a side chain of basic or neutral  $\alpha$ -amino acids; and Z is a hydrogen, alkali metal, ammonium group, organic ammonium group or  $\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{OH}$ .

### Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Velisek et al. is directed to 3-chloro-1,2-propanediol derived amino acids in protein hydrolytes. The main reaction product is identified by the following structure:



This compound was in a solution of pH 6, 8, 10, or 12. R corresponds to the side chain of amino acids which includes glycine, alanine, valine, leucine, isoleucine, phenylalanine, glutamate, aspartate, cysteine, methionine, lysine and proline (tables 2 and 3). The solutions contained 2.5 M of amino acids (page 140, model systems). These chemical hydroxylates are taught as being employed as seasonings for the improvement of flavor (page 139, first paragraph).

### Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Velisek et al. do not teach that these compositions are capable of being utilized in cosmetics. However, this deficiency is cured by Carrell et al.

Carrell et al. is directed to hydroxyl ions as unique therapeutic agents. The compounds of the invention have the formula (column 4):



Compounds that are listed that particularly useful for the  $R^2$  include H (which corresponds to glycine),  $CH_3$  (alanine),  $NH(CH_2)_3$  (ornithine),  $H_2NCOCH_2CH_2$  (glutamine), as well as side chains corresponding to lysine, isoleucine, methionine, tryptophan, and valine (columns 8-9, lines 49-65 and 1-20). Y is taught as is a H or salt thereof such as lithium, potassium tetramethylammonium, etc. (column 5, lines 63-65).

It is taught that the compositions can be utilized to prove a dermal therapeutic effect (column 11, lines 58-67) and topical therapeutic effects (column 5, line 14). Formulations include ointments and creams (example 12). Exemplified amounts of the hydroxyl ion modulating compounds are from 1 to 15% of the total mixture (example 12)

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

Regarding the preambles of claims 1-8, the recitation of cosmetic, skin care cosmetic, and hair cosmetic have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a

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structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Based on the teachings of Carrell et al. which teach that similar compounds can be utilized in cosmetics, there is a reasonable expectation that the solutions of Velisek are capable of being utilized in cosmetics. Therefore, it would have been obvious to one of ordinary skill in the art to utilize the compositions taught by Velisek in cosmetic formulations.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

**Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Velisek et al. in view of Carrell et al. and in further view of Berge (J. Pharmaceutical Sciences, 1977).**

#### **Applicant Claims**

The instant application claims that groups Z is an organic ammonium groups of the formula  $NR_4^+$ , where R is selected from the group consisting of a hydrogen atoms, methyl, ethyl, hydroxymethyl, hydroxyethyl, 2-methyl-1,3-propanediol-2yl and 2-methyl-1-propanolamine-2yl wherein at least one R groups is not a hydrogen atoms.

#### **Determination of the Scope and Content of the Prior Art**

**(MPEP §2141.01)**

The teachings of Velisek et al. are set forth above. Velisek et al. teach compositions comprising 3-chloro-1,2-propanediol derived amino acids. Carrell et al. teach compounds similar to that of Velisek et al. and their corresponding salts such as lithium, potassium and tetramethylammonium and that these compounds can be utilized in cosmetic type compositions.

**Ascertainment of the Difference Between Scope the Prior Art and the Claims  
(MPEP §2141.012)**

Velisek et al. do not teach forming the corresponding ammonium salts of the 3-chloro-1,2-propanediol derived amino acids. However, this deficiency is cured by Berge et al.

Berge et al. is directed to pharmaceutical salts. It is taught that the chemical, biological, physical and economic characteristics of medicinal agents can be manipulated and often optimized by conversion to a salt form (page 1, first paragraph). Other reasons for choosing the salt form include stability, hygroscopicity and flowability of the resulting compound (page 1, second paragraph). Salts taught as suitable include aluminum, calcium, ethylenediamine, diethanolamine, etc. (Table 1).

***Finding of Prima Facie Obviousness Rationale and Motivation*  
(MPEP §2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Velisek et al., Carrell et al. and Berge et al. and utilize ammonium salts such as diethanolamine salts of the 3-chloro-1,2-propanediol derived amino acids. One of ordinary skill in the art would have been



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motivated to utilize the salt variety of these compounds in order to manipulate the chemical, biological, physical and economic characteristics of the agent as taught by Berge et al.

Absent any evidence to the contrary, and based upon the teachings of the prior art, there would have been a reasonable expectation of success in practicing the instantly claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABIGAIL FISHER whose telephone number is (571)270-3502. The examiner can normally be reached on M-Th 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abigail Fisher  
Examiner  
Art Unit 1616

AF

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616